PORUNAI

RIVER CIVILIZATION

DEPARTMENT OF ARCHAEOLOGY
GOVERNMENT OF TAMIL NADU

PORUNAI

RIVER CIVILIZATION

GOVERNMENT OF TAMIL NADU
DEPARTMENT OF ARCHAEOLOGY

M K Stalin
Chief Minister,

Secretariat
Chennai-600 009

Date: 7.92021

FOREWORD

Tamil land is very ancient. Proper excavations are necessary to scientifically establish the antiquity of Tamil language and the culture of Tamils. The artefacts from excavations and inscriptions serve left by our ancestors as evidences to reconstruct our history. Every villages and hamlets of Tamil Nadu are left with evidences in the form of temples, inscriptions, rock paintings, hero stones or sluices which stand as testimony to our water management techniques. It is our paramount duty to protect these archaeological and historical monuments.

It is a matter of immense pride that Tamil Nadu was the first state across the country to have a State level archaeological department to meet these noble demands. The archaeological department was founded in 1961 to protect the archaeological vestiges and historical monuments, to undertake archaeological excavations in order to write our history and to decipher and publish the as texts of the inscriptions of Tamil Nadu, the number of which is highest in the country.

Going by the adage ‘seek wealth, even by riding across the sea’, the ancient Tamil society had trade relationships at national and international level. Through various exchanges that was made possible by the trade relationships, Tamil society was not just different but more developed than other societies.

The ports of Sangam era such as Poompuhar, Korkai, Azhagankulam and Vasavasamudram played an important role in trade relationships. Through these ports, the ancient Tamil society had established trade relations with Western countries and Southeast Asian countries. The Sangam literature mentions the Westerners as Yavanas. The Tamil society had trade contacts with Rome, Egypt, Oman and Arabia. The discovery of potsherds engraved with Damililetters, contracts and accounts of foreigners serve as testimony to this.

The excavations at the ports of Sangam era – Poompuhar, Korkai, Vasavasamudram and Azhagankulam – have highlighted to the world the significance of ancient Tamil land’s international trade relations.

Besides, the Tamil Nadu Government undertook archaeological excavations at Karur and Tirukoyilur, the capital cities of kings and chieftains and also in Sangam Age villages at Mangudi, Mangulam, Kodumanal and KovalanPottal to unravel the cultural history of Sangam Age.

Finally, the Tamil Nadu government has been undertaking excavations at Keeladi on the banks of Vaigai river since 2017. Keeladi is a pioneering effort among excavations. There were two schools of thought till now: That there was no urban Tamil civilization contemporary to the Gangetic plains which had an urban civilization in 6th Century BCE and the Brahmi script was developed by the Mauryas. The schools of thought have a scientific response now. The Keeladi excavation has established beyond doubt that Tamil Nadu did not just have an urban civilization in 6th Century BCE but was also a developed and literate society.

During the eras of King Rajaraja I and King Rajendra I, the administration, socio-economy, arts and culture were at their best. Similarly, excavations have been done in places of historical significance such as Pallavamedu in Kanchipuram,the capital of Pallavas, Chola capitals including Kurumbanmedu at Thanjavur, GangaikondaCholapuram, Maligaimedu and Pazhayarai, Hoysala's capital Kannanur and have revealed significant historical moorings. Excavations at the sites of Senthamangalam, the capital of Kaadavaraayar king Koperunsingan and Padavedu, the capital of Sambuvarayas, too have added glory to our history.

The Tamil Nadu government has plans to travel and trace the ancient footprints of Tamil society, wherever they maybe. The travel would not be confined to other States that has imprints of ancient Tamil history but would also expand internationally to trace the roots of culture born out of trade relations with the Western and Southeast Asian countries.

We would proclaim the antiquity of the Tamils to the world!

FOREWORD

(மு.க. ஸ்டாலின்)
தமிழக முதலமைச்சர்

ThangamThennarasu

Hon'ble minister for Industries,
Tamil official language and Tamil culture, and Archaeology

The Porunai river civilization is being called the Cradle of South Indian history. Porunai, which rises in the Podhigai hills and enriches this area: the southern tip of Tamil Nadu, has been described by Kamban as'Flowing river of gold, Porunai'.

The river is referred in inscriptions as ta□porunthamand ta□porunam. The significant archaeological sites such as Korkai, Adichanallur, and Sivagalai are located on the banks of river Porunai. Of these, Korkai served as the capital of the Sangam era Pandya dynasty.

Ilango's Silapathikaram describes the Pandyan kingdom as the conquerors of the north, and the rulers of the south.

"They took the Ganga and the Himalayas of the north

And reigned over the south. Long live."

Greek and Roman authors, including Pliny and Ptolemy, and the Ancient Greek text Periplus of the Erythrean Sea, mention the Pandyan kingdom's richness, and corroborate with the descriptions of the Sangam poems.

The 19th century scholar, Robert Caldwell, then the Bishop of Tirunelveli, was one of the first to arrive at Korkai and study its history. Bishop Caldwell read ancient manuscripts and foreigners' accounts of Korkai, unearthed ancient coins from various kingdoms and empires and found burial urns dating to antiquity. With these evidences, Caldwell identified Korkai as the port town and capital city of the Pandyas, thus bringing this city to the attention of the world.

The regal city of Korkai was the home of, and nourished the Second Sangam. Here reigned 79 Pandiyan kings, beginning with the founder of the Second Sangam, Venderchezhizhan, all the way to Mudaththirumaaran. These kings were known by their titles, including KorkaiKomaan (Ko in Tamil means king), KorkaiKon, KorkaiPorunan, KorkaiVenthan, KorkaiThuraivan, KorkaiYaali among others, inextricably linking these royal historical figures to the capital and port city of the Sangam Pandyans.

Meanwhile, Ptolemy, Pliny, and Megasthenes refer to the Korkai port as Kolchis,

Kolkai andKolhoi emporium.

Korkai and its sea was where the profession of pearl diving arose and thrived. The Pandiyan kings preserved this form through the ages.

A poem by Madurai Kanakkayanar from the Sangam compilation of Akananurusays

"These pearls of Korkai,

guarded as righteous duty,

by the Valiant Pandiyas"

The same poet, in another poem, (Narrrinai 23 5-6) describes the pearls off the Korkai coast as 'Pearls of the fresh water'

Merchants and traders, and the sailors of Greece and Egypt saw Korkai as a vast and rich trading centre. While scholars and writers such as Maloni and Lovanthal studied Korkai and discovered coins including gold coins. Lovanthal collection became the subject of two books in English: Coins of Tinnevely, Golden Coins of Tinnevely.

The scholars R P Sethupillai, and M Varadarajan have both also explored the history of Korkai in their works in view of their love towards Korkai.

This book, titled 'Porunai River Civilisation', features information from sources such as German ethnologist Dr.FedorJagor's 1876 exploration and catalog of artefacts from Adichanallur, British archaeologist Alexander Rea, who conducted extensive excavations and study in Adichanallur and its surroundings between 1903 and 1904, and the excavations led by Superintending Archaeologist Sathyamurthy under the Indian Union's Archaeological Survey of India between 2003 and 2005. Additionally, the book also features artefacts and information arising from the ongoing Tamil Nadu Department of Archaeology's excavations at Adichanallur, Korkai and Sivagalai.

Analysis of archaeological material from Adichanallur points to the possibility that the culture that lived on the Porunai river banks could have discovered iron over 3200 years before present, and developed the technology to manufacture objects with cast iron, wrought iron, and steel, as well as boat building and navigational technology.. We can confidently say that the Adichanallurcivilization was the culture of advanced Tamil society of that era.

This book will showcase the antiquity, beauty and value of ancient Tamil society, and add strength to Tamil society's claim to being one of the earliest civilizations in the world. I believe and hope that this book will be warmly welcomed

Prof **K Rajan**

Academic and Research Advisor
Tamil Nadu Department of Archaeology

FOREWORD

It gives me great pleasure, and satisfaction, that the Tamil Nadu State Department of Archaeology has undertaken extensive explorations and archaeological excavations across the state to study, analyse and reconstruct the history and archaeology of the 15 lakh years pastexcellent history based on primary sources such as archaeological, epigraphical, numismatic and copper plates.

The recent excavations conducted at Keeladi, Azhagankulam, Korkai, Sivagalai, Adichanallur, Kodumanal, Mayiladumparai and GaingaikondaCholapuram have pushed the antiquity and history of Tamil Nadu by many centuries based on new dates.

The on-going excavations in the banks of Porunai river, in particular, has showed that Tamil Nadu's history must begin from its southern part.

Further, it is commendable that the department has been working diligently with experts and researchers working in high level scientific institutions of India and abroad in the field of geography, geology, anthropology, physics, chemistry, botany, zoology and ancient DNA to reclaim and establish Tamil Nadu's past history.

This booklet in your hand, is the result of these multidisciplinary activities. This small publication is the result of the thought that Tamil people should learn the truth of their land, history and that the activities of the Tamil Nadu Department of Archaeology and the evidences exposed in theirrecent excavations. . I thank the government of Tamil Nadu which has been supporting and encouraging the department and its activities, and I join you all in wishing the department continue its mission to bring truth to light. May their work continue to flourish.

PORUNAI

RIVER CIVILIZATION

The cradle of Tamil culture

The statement by Honourable Chief Minister at the State Assembly under rule 110 9-9-2021

Honourable Speaker,

For the entire world to be delirious!
Your fervor spread in all directions!

Oh! Tamil Lady!

Ever remain afresh
Thee alone! Purity intact too!
Delighted! Praise thou beauteous Tamil, youthful forever

As proposed by Manonmaniyam Sundaranar, I wish to make some announcements under State Assembly rule 110 to add strength to the history of Tamils leaving their footprints across the globe and on the classical language Tamil's antiquity and its continuity.

It is my duty to record in this Assembly the great efforts of Muthamizh Arignar Kalaignar to conduct extensive deep sea marine archaeological explorations for the first time in the country. It is now common knowledge that the discovery of some constructions in the underwater archaeological excavation held in search of Poompuhar and the major plan hatched in 1990 for marine research, was the result of the efforts taken by Muthamizh Arignar Kalaignar. Keeping in line with this tradition, the excavations underway at Keeladi has attracted international attention. Muthamizh Arignar Kalaignar strongly condemned the Union government when it abandoned halfway through the Keeladi excavation that

மாண்புமிகு தமிழ்நாடு முதலமைச்சர் அவர்கள் கீழடி அகழாய்வுத் தளத்தினை பார்வையிடல் – 2019

gave in abundant cultural materials of Tamils.

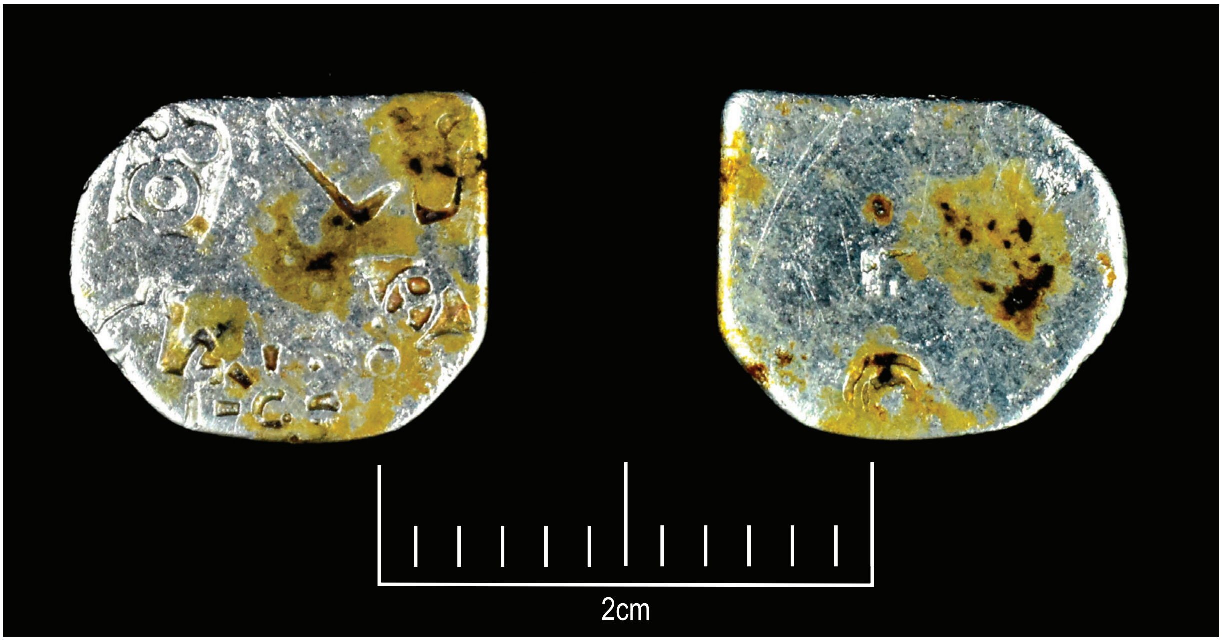
When I was the opposition leader in 2019, I had visited Keeladi and supervised the excavations. The astonishing brick constructions, black-and-red ware, rare gemstones, gold jewellery, the skeletal remains of a humped bull as one found in Indus Valley civilization, toys and industrial site served to prove the affluence of Sangam era Tamils, not just to me but to the entire world!

கருப்பு–சிவப்பு நிறமட்கலப் பாத்திரம்–கீழடி

Not just that, the members of this august Assembly are aware that Sangam era Tamils have been literate even in 6th Century BCE according to the Carbon dating results.

In that sense, the single word Keeladi became a binding factor for Tamils across the globe. Bearing the same emotion, the Tamil Nadu government's archaeological department has been currently holding excavations at Keeladi, Adichanallur, Sivagalai, Korkai, Kodumanal, Mayiladumparai and GangaikondaCholapuram. The Tamil Nadu Archaeological department has held consultations with prominent archaeologists and technologists across the country on the ancient artefacts discovered in these excavations. Based on this, I take immense pride in making the following announcements.

Silver punch marked coin was recently found at Keeladi with the symbols of



கி.மு. 4ஆம் நூற்றாண்டிற்கு முந்தைய வெள்ளிக் காசின் முன் பின் பக்கங்கள் – கீழடி

Sun, Moon, Taurine and few geometrical designs. Renowned numismatist and Kolkata University Professor SushmithaBasuMazumdarexamined the coin and has opined that it could be before 4th century BCE, meaning it could be pre-Mauryan before the period of Emperor Asoka.

Previously, Keeladi excavations yielded an earliest Carbon Dateof 6th century BCE (585 BCE). I am proud to declare that now during the current season two more AMSdates have been received confirming the same time period.

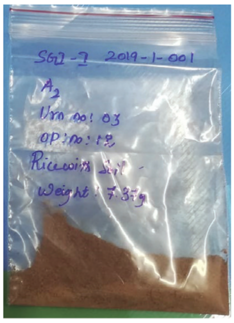
It has already been confirmed from the carbon dating results of previous excavations that Korkai was a functioning port before 8th century BCE.

In the current excavation at Korkai, black slipped ware from Gangetic plains have been discovered. After a careful examination and research, former Director General of Archaeological Survey of India DrRakesh Tewari and Hindu Banaras University Professor RavindraNath Singh had confirmed that Korkai port had trade relations with other parts of India and abroad as early as 6th century BCE.

கங்கைச் சமவெளியைச் சார்ந்த கருப்பு வண்ணப் பூச்சு பெற்ற பானை ஓடுகள் கிடைக்கப்பெற்ற மட்கலன் – கொற்கை

ஒன்பது அடுக்குக்களுடன் கூடிய துளையிடப்பட்ட குழாய்கள் – கொற்கை

I would like to release important research findings that will be the real jewel in the crown.



உமி நீங்கிய நெல்மணிகளின் மாதிரி

The select Carbon samples of husk removed paddy recovered from urn burial excavation at Sivagalai near Adichanallur were sent for AMS Carbon Dating Test to the prestigious "Beta Analytical Laboratory" located in Miami, Florida State of USA. The results which were obtained recently are quite a revelation to the archaeological community. Rice along with husk found in offering pot of within the urn at Sivagalai yielded the date of 1155 BCE.

I take immense pride and happiness in announcing to the world that based on scientific research it is confirmed that the Tamiraparani river civilization called as

BETA Beta Analytic TESTING LABORATORY

Beta Analytic, Inc.
4985 SW 74th Court
Miami, FL 33155 USA
Tel: 305-667-5167
Fax: 305-663-0964
info@betalabservices.com

ISO/IEC 17025:2017-Accredited Testing Laboratory

REPORT OF RADIOCARBON DATING ANALYSES

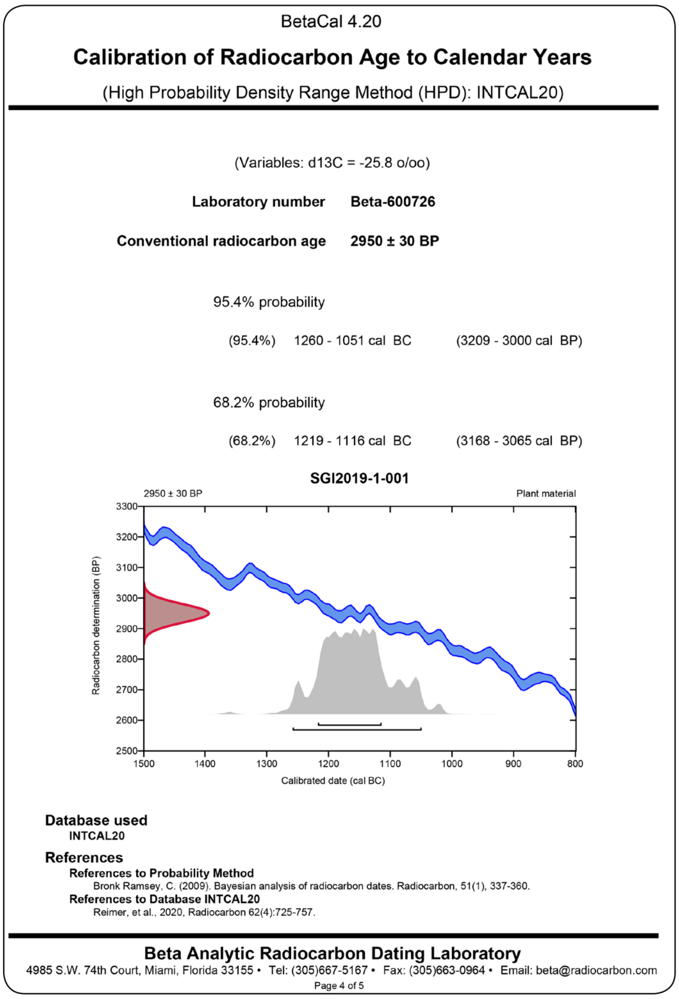
Ramalingam Sivanantham — Report Date: August 27, 2021

Tamil Nadu Department of Archaeology — Material Received: August 18, 2021

Laboratory Number	Sample Code Number	Conventional Radiocarbon Age (BP) or Percent Modern Carbon (pMC) & Stable Isotopes	
Beta - 600726	**SGI2019-1-001**	**2950 +/- 30 BP**	IRMS δ13C: -25.8 o/oo

(95.4%) **1260 - 1051 cal BC** **(3209 - 3000 cal BP)**

Submitter Material: Organics (rice with soil)
Pretreatment: (plant material) acid/alkali/acid
Analyzed Material: Plant material
Analysis Service: AMS-PRIORITY delivery
Percent Modern Carbon: 69.26 +/- 0.26 pMC
Fraction Modern Carbon: 0.6926 +/- 0.0026
D14C: -307.36 +/- 2.59 o/oo
Δ14C: -313.28 +/- 2.59 o/oo (1950:2021)
Measured Radiocarbon Age: (without d13C correction): 2960 +/- 30 BP
Calibration: BetaCal4.20: HPD method: INTCAL20


BetaCal 4.20

Calibration of Radiocarbon Age to Calendar Years

(High Probability Density Range Method (HPD): INTCAL20)

(Variables: d13C = -25.8 o/oo)

Laboratory number **Beta-600726**

Conventional radiocarbon age **2950 ± 30 BP**

95.4% probability

(95.4%) 1260 - 1051 cal BC (3209 - 3000 cal BP)

68.2% probability

(68.2%) 1219 - 1116 cal BC (3168 - 3065 cal BP)

SGI2019-1-001

Database used
INTCAL20

References
References to Probability Method
Bronk Ramsey, C. (2009). Bayesian analysis of radiocarbon dates. Radiocarbon, 51(1), 337-360.
References to Database INTCAL20
Reimer, et al., 2020, Radiocarbon 62(4):725-757.

Beta Analytic Radiocarbon Dating Laboratory
4985 S.W. 74th Court, Miami, Florida 33155 • Tel: (305)667-5167 • Fax: (305)663-0964 • Email: beta@radiocarbon.com
Page 4 of 5

Than-Porunai is at least 3200 years old.

The august house is aware of the fact that in our budget, five crore rupees have been allotted for excavations and marine excavations with a view to expose to the world the rich culture of the ancient Tamils, its marine trade, water management, iron smelting, products of rare gems and pearl diving and in an effort to collect evidences for the same. This budget allocation is highest anywhere in India. Following this, to showcase the artefacts obtained in Sivagalai, Korkai and Adichanallur, a Porunai museum would be set up at Tirunelveli, with all modern amenities.

I also take pleasure in announcing in this august house that the Archaeological department will undertake excavations after obtaining due permissions across the country and in countries where the ancient Tamils have left their footprints in search of our Tamil cultural roots.

To begin with, the Sangam era port Musiri,now known as Pattinam, is situated in Kerala. To understand and trace the roots of Chera country's antiquity and culture, the research work will be undertaken along with Kerala's archaeological experts. Similarly, efforts will be taken to conduct excavations at historically significant places including Andhra's Vengi, Karnataka's Thalaikkadu and Odisha's Palur.

Potsherds bearing Damili (Tamil-Brahmi) scriptshave been found in Egypt's (part of ancient Rome) Quseir-al-Qadim, Bernice and in Oman's KhorRori confirming the trade relations with ancient Tamil Nadu. Efforts will be made to undertake exploration in these areas with the assistance of archaeologists of that countries.

முசிறி – அமண என்று
தமிழி எழுத்துப் பொறித்த பானை ஓடு

Excavations will be undertaken after obtaining due permission and with the assistance of archaeologists of that countries in Southeast Asian countries like Indonesia, Thailand,

குசிர்–அல்–காதிம்: கணன், சாதன், பானை ஓரி என்று தமிழி எழுத்துகளால் பொறிக்கப்பட்ட பானை ஓடுகள்

கோர்ரோரி,ஓமன் நாடு – ணந்தை கீரன் தமிழி எழுத்துப் பொறிக்கப்பட்ட பானை ஓடு

Malaysia and Vietnam where emperor RajendraChola had left his footprints of victory.

"All the world is our town, all human our kin"

So declared Tamils to the world. In search of Tamil's cultural identity, we would now travel across the world.

I take deep pride in announcing to the world through this August house that this government considers it its prime duty to scientifically establish on the basis of evidences that the writing of the history of the Indian subcontinent should now begin from the Tamil Nadu.

Nandri Vanakkam!!

தமிழி எழுத்துப்பொறிப்புக் கொண்ட பானை ஓடுகள் – கீழடி

PORUNAI IN LITERATURE

The 'AanPorunai' river of Chera Nadu (analogous to present day Kerala) has been referred to as 'Porunai', and 'Than AanPorunai' in Sangam literature. However, South Pandya Nadu's (present day Thirunelveli and Thoothukudi districts of Tamil Nadu) "Thanporunai" river (Thamirabarani river) finds mention in literature as 'Porunai', 'Thanporunai', 'Porunal', 'Poruntham'.

In his commentary of the primal Tamil grammar, Tholkappiyam, poet Nachchinarkiniyar points to the 50th verse of the text and says:

"The rivers Kaveri, and ThanPorunai, and AanPorunai, and the Vaigai", clearly distinguishing between two rivers with similar names.

Emperor Ashoka (273-232 BCE) in the Girnar edict, refers to the Thanporunai river as 'Thaampanni'.

The Purananooru, one of the canonical texts of Tamil Sangam literature, associates 'Thanporunai' with the Vanji region, and says

Puranaanooru 11

Young girls with shapely forearms covered in downy hair
பாவைக்கு
Wearing pure white clothes
Decorate the Goddess they sculpted out of river sand
With flowers from hanging branches
And frolic in the cool waters of Porunai River
That flows by the famed town of the valorous ruler
Who demolished fortifications of his foes
And won over their wealth(Purananuru 11)
(Porunai - The 'Aanporunai river flowing near Karuvur)

"அரி மயிர்த் திரள் முன்கை
வால் இழை, மட மங்கையர்
வரி மணற் புனை பாவைக்குக்
குலவுச் சினைப் பூக் கொய்து
தண் பொருநைப் புனல் பாயும்

விண் பொருபுகழ், விறல்வஞ்சிப்

பாடல் சான்ற விறல்வேந் தனும்மே

வெப் புடைய அரண் கடந்து,

துப்புறுவர் புறம்பெற் றிசினே" (புறநானூறு 11)

Literature of the Post Sangam period calls the Thamirabarani river as 'Thanporunai'

The text ThiruvaaiMozhi, by Bhakti poet Nammaazhvaar refers to the river as 'Porunal'. An encyclopaedia published by the Tamil Development Board says that the word 'Poruntham' could have transformed and evolved into 'Porunai', and that it comes from the word 'Porunthuthal' - meaning apt, or fitting.

Oh my heart! Always hold on to the feet of him
Who sang the scriptures in poetic form
Praising the country of Pandyas
And the town of South Kurugoor
And the pleasing bountiful Porunai

"திருவழுதி நாடென்றும் தென்குருகூ ரென்றும்,

மருவினிய வண்பொருநல் என்றும், – அருமறைகள்

அந்தாதி செய்தான் அடியிணையே எப்பொழுதும்,

சிந்தியாய் நெஞ்சே தெளிந்து."(திருவாய் மொழி தனியன்)

–

The lines below appear in the 31st poem of the Nadavitta folio of the Kishkinta book, of Kambaramayanam

If you reach the broad swathe of Podhigai hills in southern Tamil Nadu,
That's the abode of the wise sage who founded Tamil Sangam,
Where he resides eternally; So bow down to it,
And follow the golden waters of the blessed Porunai River
Beyond which you will find the majestic slopes of Mahendra mountain
Where elephant calfs roam, and then the ocean.

"தென் தமிழ்நாட்டகன் பொதியில்

திருமுனிவன் தமிழ்ச்சங்கம் சேர்கிற்பீரேல்

என்றும் அவன் உறைவிடமாம்

ஆதலால் அம்மனையை இடத்திலிட்டு ஏகில்

பொன்றிணிந்த புனல் பெருகும் பொருநையெனும்

திருநதியின் பின்பொழிய நாகக்

கன்று வளர் தடஞ்சாரல் மகேந்திரமா

நெடுவரையும் கடலும் காண்பீர்"

என்று பொருநை குறிப்பிடப்படுகின்றது.

And in the work ‘KalingathuParani’

*They praised the Ruler of Ponni**
They praised the Lord of Porunai

(*River Cauvery)

"பொன்னித் துறைவனை வாழ்த்தினவே

பொருநைக் கணவனை வாழ்த்தினவே"

This song too, speaks of the splendour of Porunai.

Meanwhile, the MurtiNayanarPuranam (story/myth) of the MumayalUlaganda collection in Sekkizhaar'sPeriyaPuranam (The great mythology), mentions ‘Than Poruntham’.

The inherently lustrous pearl -
It's found inside the red lips of sweet talking girls with
Swaying creeper like hips, long cool eyes,
And bamboo stalk like supple shoulders;
It's also found in the ocean where cool waters of Porunai river
Flow into, breaking the river banks on its way;

"சாயுந்தளிர்வல்லி மருங்கு னெடுந் தடங்கண்

வேயும் படுதோளியா பண்படு மின்சொற் செய்ய

வாயும் படுநீள்கரை மண்பொருந் தண்பொருந்தம்

பாயுங் கடலும் படுநீர்மை பனித்த முத்தம்".

As per this poem, the Than Poruntham is the cooling waters of the Thamirabarani river.

The Rajaraja Cholan Ula (travels), extolls the virtues of the river 'Porunai'. While another text, the MukkooddarPallu, says, "Look, townspeople, the Porunai River is in spate."

The Thiruvilayadal Puranam (Thiruvilayadal Myth) written by Sage Paranjyothi, in the section titled 'Sacred Pandian Kingdom', has this to say: "The hill maiden Podhigai nurtures the bountiful waters of Thanporunai like she is her daughter."

Majestic lady that is Podhigai hills -
Deep mountain spring her navel,
Supple bamboo her shoulders,
Dark clouds the covering she wears
Over her bosom that are mountain peaks;
With water cascading from peaks as nourishing milk,
She births her daughter flourishing River Porunai.

"கருநிறமேகமென்னுங்கச்சணிசிகரக்கொங்கை

யருவியாந்தீம்பால்சோரவகன்சுனையென்னுங்கொப்பூழ்

பொருவில்வேயென் னுமென்றோட்பொதியமாஞ்சைலப்பாவை

பெருகுதண்பொருநை யென்னும்பெண்மகப்பெற்றாளன்றே(7)

மேலும்,

"பன்மலர்மாலை வேய்ந்துபானுரைப்போர்வை போர்த்துத்

தென்மலைத்தேய்ந்தசாந்தமான்மதச்சேறுபூசிப்

பொன்மணியாரந்தாங்கிப் பொருனையாங்கன்னிமுந்நீர்த்

தன்மகிழ்கிழவனாகந்தழீ இக்கொடுகலந்ததன்றே. (10)

That maiden Porunai, Wearing a garland of flowers,
Covering herself with froth,
Fragrant with sandal and musk from the hills,
Adorned with gems and jewels,
Rushes to embrace her loving Lord that's the ocean.

"பன்மலர்மாலை வேய்ந்துபானுரைப்போர்வை போர்த்துத்
தென்மலைத்தேய்ந்தசாந்தமான்மதச்சேறுபூசிப்
பொன்மணியாரந்தாங்கிப் பொருனையாங்கன்னிமுந்நீர்த்
தன்மகிழ்கிழவனாகந்தழீ இக்கொடுகலந்ததன்றே. (10)

The religious text 'Meenakshi Ammai Pillai Tamizh' by Kumaragurubara Adigal carries a praise of the river. "Oh lord of the Porunai, bless us with fresh waters this Aadi!" In the text 'Thiruchendur Pillai Tamizh', the author PagazhiKoothar says: "Tamizhcivilization is the fragrance that charges the waters of the great Porunai river."

Finally, Bharathiar exalts the river and describes Thanporunai as that which was witness to Tamizh.

Porunai in stone inscriptions

A Vattezhuthu (an older script used to write Tamil) inscription, issued in the 28th regnal year of Rajaraja I (CE 1013), found in the SatyanarayanaPerumal temple, Seevalaperi town, Tirunelveli district, reads, 'The north banks of Than Poruntham is given to my lord of the South Thirumalancholai' (Annual Report on Indian Epigraphy 1906 No. 411)

The Gopalakrishnaswamy temple in Mannarkoil, of the Ambasamudram Taluk, Thirunelveli district features an inscription that says "Thanporunthan that is the MudikondaChola River"

The river MudikondaCholaperaru, referred to in this inscription, was called Thanporuntham. This inscription was issued during the 13th regnal year of SundaraCholaPandiyan (CE 1052-64), born Rajendra Devan, the second son of Chola king Rajendra I (CE 1011-44) (EpigraphicaIndicaVol.11 No. 30)

Further, the CE 13th Century inscription of Thribuvanachakravarthy Maaravarman Sundarapandiyan, in the Chandrasekara temple in Maaramangalam Village, Thiruvaikuntamtaluk, Thirunelveli refers to the Thanporunai river.

Thus, we see that the river Thanporunai, or Porunai, finds mention in early literature, poetry, epics and myths, and in stone inscriptions through the ages, and that the river and the land it flows through has been called the cradle of Tamil culture and civilization.

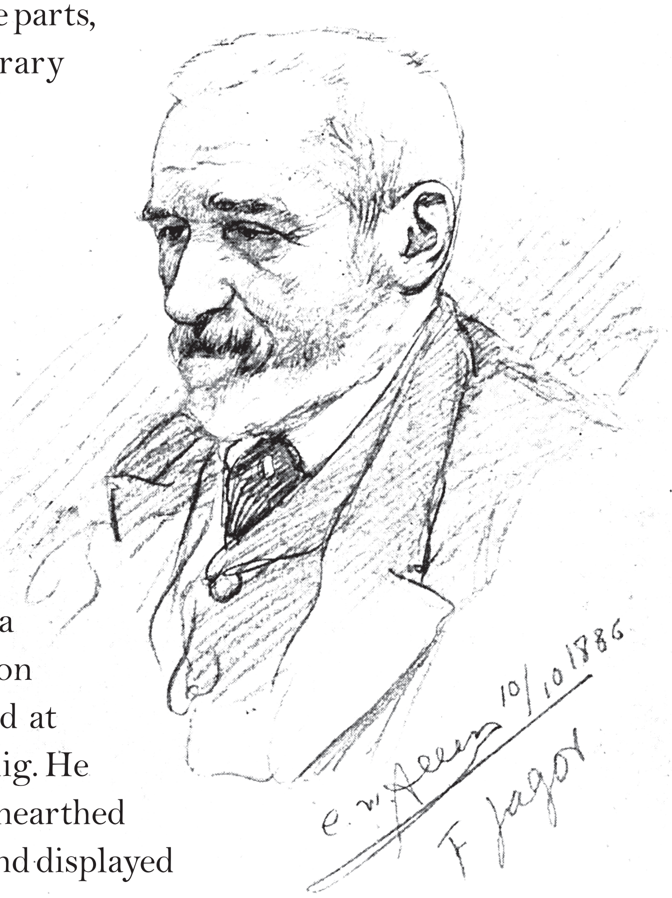
(parts of this section are repeated, and redundant)

PORUNAI RIVER CIVILISATION

The archaeological excavation at AdichanallurParambu complex is the first ever archaeological research undertaken in Indian history. This excavation unearthed many material that are now considered the oldest archaeological artefacts in the country.

Adichanallur is located about 12 km from Palayankottai, on the Thirunelveli - Tiruchendur road. It is on the banks of the Thanporunai river. Here, an earthen mound called Parambu, lying north-south on the southern bank of the river, and measures 114 acres in spread. The northern part of the mound is raised, while the southern is low-lying.

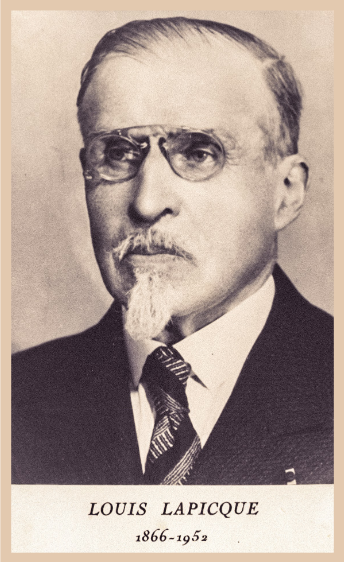
The mound was considered unsuitable for cultivation and fallow land, thus giving it its name of Parambu. This parcel of land was used by prehistoric people of these parts, ancient Tamil society, as a funerary and burial ground of their dead.



First excavation

Dr Fedor Jagor of Berlin, an ethnologist and explorer, determined to clear the Adichanallur Parambu, dig trenches and excavate the ancient treasures he believed were buried there.

He set sail for India, and after a long journey via sea, overland on train and other modes, he arrived at Adichanallur and undertook his dig. He took the ancient Tamil artefacts unearthed here with him back to Germany, and displayed them at the Berlin Museum.



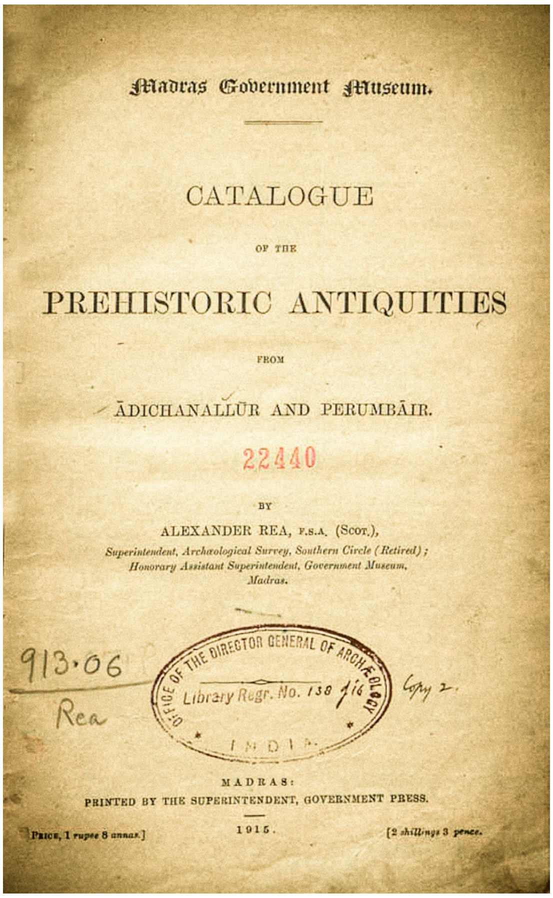
Louis Lapicque, of Paris, France did field research here in 1903-04 and added to the corpus of knowledge about Adichanallur | |)

Second excavation

Alexander Rea undertook extensive archaeological excavation in 1903-04 in Adichanallur Parambu. Working carefully and diligently, Rea placed trenches in the mound, and retrieved countless artefacts, similar to those found by Jagor. Based on the wealth of material and artefacts discovered and the treasure of objects, he determined that the burial mound must belong to an ancient past. The artefacts Alexander Rea discovered and excavated are currently displayed at the Government Museum in Chennai's Egmore and are accessible to the public for viewing.

Earthen pots over 50 different shapes and sizes have been found in Adichanallur. Further, iron tools and weapons, such as swords, knives, hand axes, short swords, together with bones, including human skulls and skeletons, were excavated. A small earthen pot placed inside a larger urn, also contained a few grains of rice paddy.

Rea, who served as an Archaeologist with the nascent Archaeological Survey of India, as well as the editor of the EpigraphiaIndica and Record of the Archaeological Survey of India, and Advisor to Government on Conservation, produced a catalogue of objects he retrieved from Adichanallur before he retired from service in October 1913. The Catalogue of the prehistoric antiquities from Adichanallur and Perumbair, with a foreword


Madras Government Museum.

CATALOGUE

OF THE

PREHISTORIC ANTIQUITIES

FROM

ĀDICHANALLŪR AND PERUMBĀIR.

22440

BY

ALEXANDER REA, F.S.A. (Scot.),
Superintendent, Archæological Survey, Southern Circle (Retired); Honorary Assistant Superintendent, Government Museum, Madras.

913.06
Rea
OFFICE OF THE DIRECTOR GENERAL OF ARCHAEOLOGY
Library Regr. No. 138/16
INDIA
Copy 2.

MADRAS:
PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS.
1915.
[Price, 1 rupee 8 annas.] [2 shillings 3 pence.

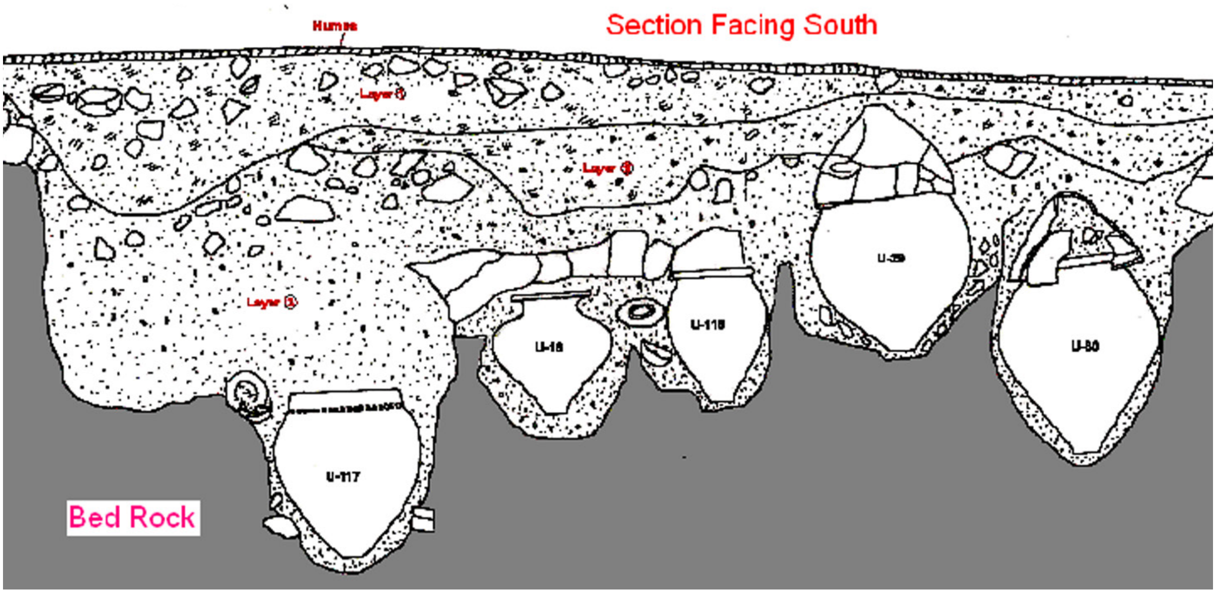
by J.R Henderson, the Superintendent of the Madras Govt Museum, was published in 1915 by the institution.

The Adichanallur Parambu mound is composed of a loose gravel layer on the top extending up to 3 feet below the surface, beneath which is a distinct layer of quartz and crystal rock. Pits and chambers had been sunk into the rock in order to place the burial urns.

Several urns have been excavated from this burial mound. Some were buried at a depth of about 6 feet, while many range from about 3 feet deep, to about 12 feet. At some places, urns have been stacked one on top of the other and buried.

This archaeological site is one of the largest prehistoric burial mounds to be excavated.

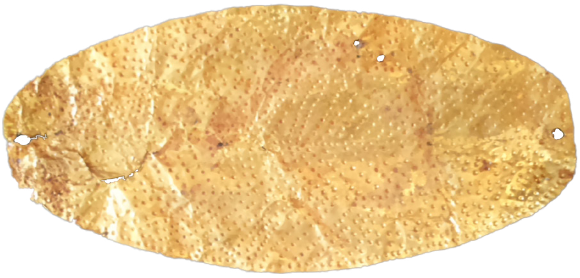
—

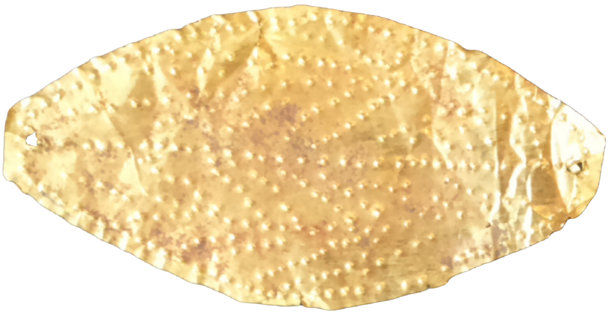


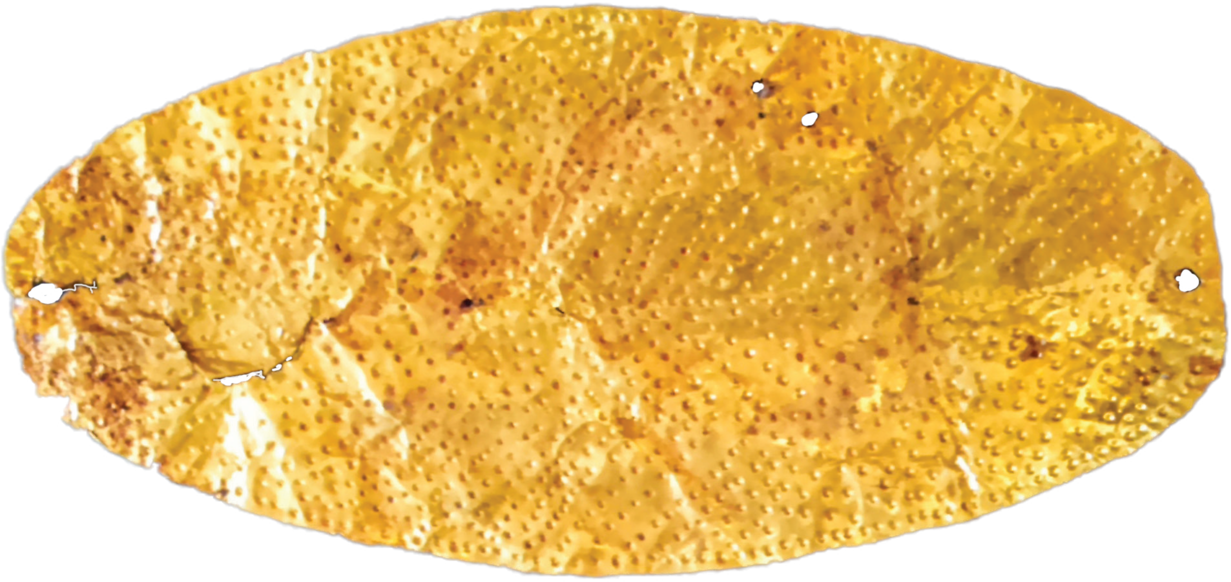
BURIAL URNS AND ARTEFACTS

Gold, high-quality copper, and iron utensils, earthen pots and bones were all placed in burial urns and then buried.

GOLD DIADEMS AND PLATES







These diadems - called Pattam in Tamil - are made from thin gold leaf foils, and are largely oval in shape. Some of these gold plates have ornamentation in the form of triangular shapes made from small dots impressed into the back side. Both ends of the diadems have holes through which a string or wire could be threaded, thus affixing them to the forehead.

These diadems have been shaped and made so as to facilitate folding or rolling up.

FEMALE FIGURINES

Female figurine found in Indus excavation

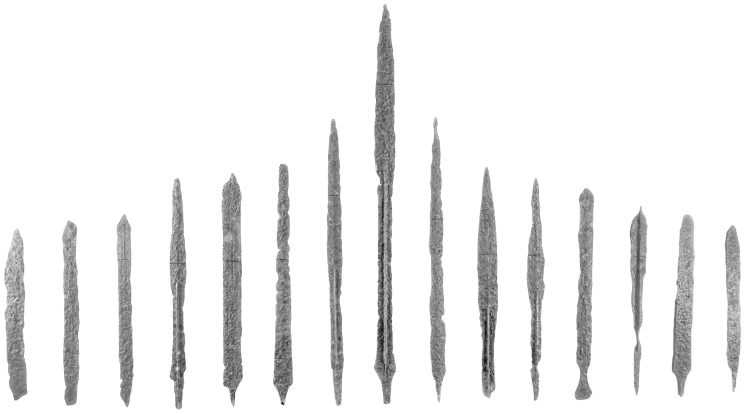
Female figurine found in Adichanallur

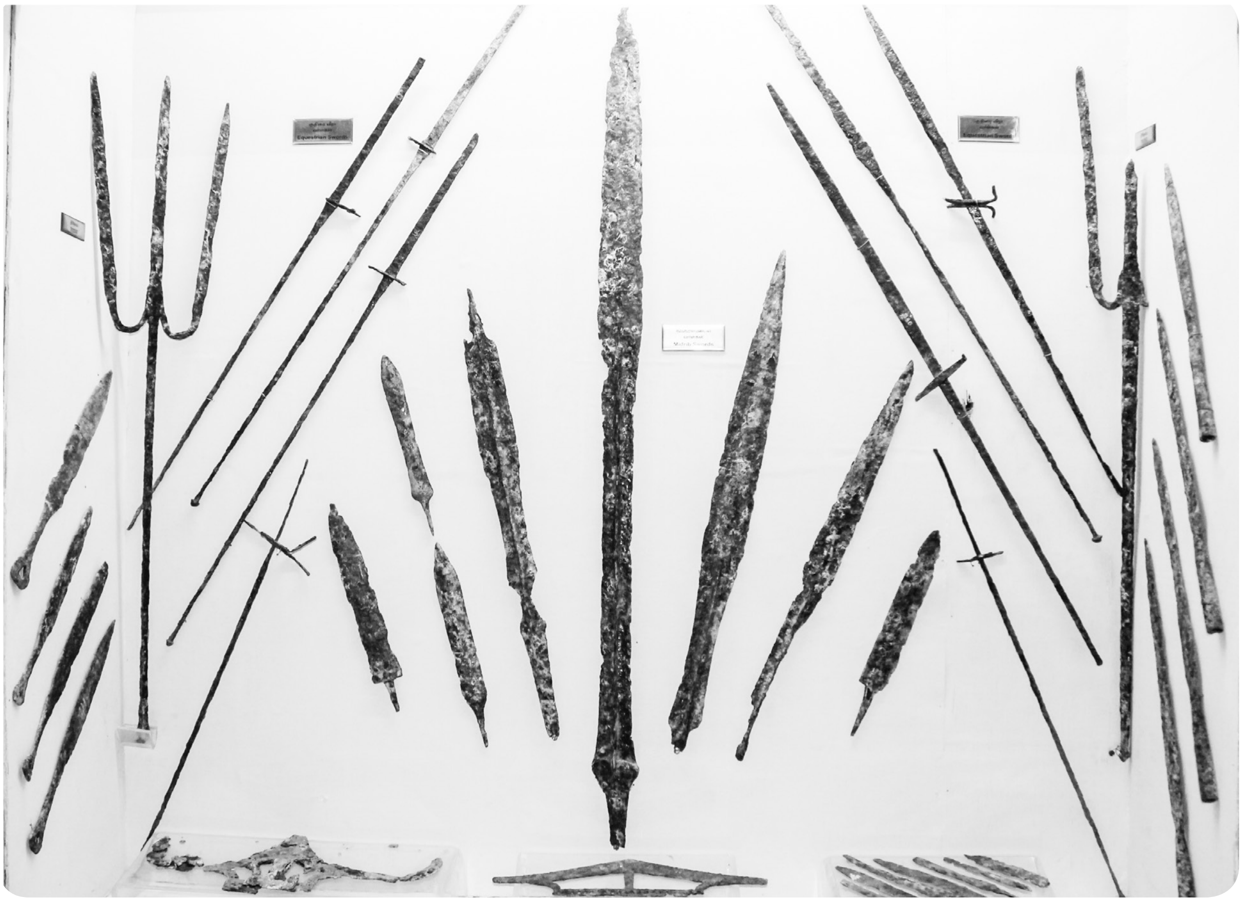
BRONZE UTENSILS AND OBJECTS

IRON WEAPONS

Spear Lance… etc

1. Spear
2. Lance
3. Dagger
4. Barbed javeline
5. Double edged Sword
6. Trident
7. Barbed arrow head
8. Hatchets
9. Sword
10. Curved knife
11. Hooks with two curved rods)
12. Sacrificed sword
13. Arrow head
14. Javeline
15. Axes
16. Trident
17. Shield
18. A Curious Weapon





19. Small Dagger
20. Small Lance
21. Lance with blade rectangular in section
22. Lance with narrow blade
23. Lance with lapering blade and hollow butt
24. Hallow tube handle of lance
25. Dagger with tapering point
26. Hatch broadest at cutting edge
27. lance with long round hollow shaft
28. Hollow iron handles with rods through the centre
29. Swords with various curved blades tapering with points
30. Lance with lapering blades and hollow handles
31. Knife
32. Reaping hook or curved knives of various form)

BLACK & RED WARE

557

BLACK & RED WARE

FOUR LEGGED JAR

BURIAL GOODS AND ANIMAL FIGURINES

Objects and goods found buried in urns are those that could have been used by the individuals during their life, or ones they desired and liked.

In the Adichanallur archaeological complex, objects recovered from burial urns include high-quality bronze bowls and utensils, flower vases, bronze figures of domesticated animals such as buffalo, goat, cow, as well as wild animals such tiger, elephant, deer. We have also found jewellery such as bangles, rings, bracelets, arm bands, ear studs and earrings.

Terracotta/Earthen pots have been decorated with dotted shapes such as circles and squares, in the bottom half of the ware. These were made by impressing the pots with a sharp iron implement before firing.

The burial urns have yielded large quantities of human bones and skulls, many of which

have been broken and crushed in places.

Also recovered are necklaces made of beads - terracotta beads in faded reddish colours, bronze beads, among others. Cutting and grinding stones have also been found outside burial chambers.

-

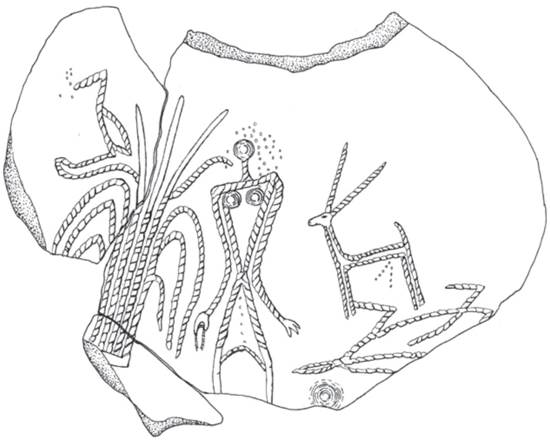
The burial urns are shaped from high-quality, super grade clay and then fired in a kiln. They are in red, black, and red-and-black colours.

The Adichanallur Parambu complex has been a never-ending source of artefacts and material that has greatly aided the Department of Archaeology in telling the prehistory of ancient Tamil Nadu. It is nothing but a priceless treasure trove of our past.

ADICHANALLUR EXCAVATION:2003-05

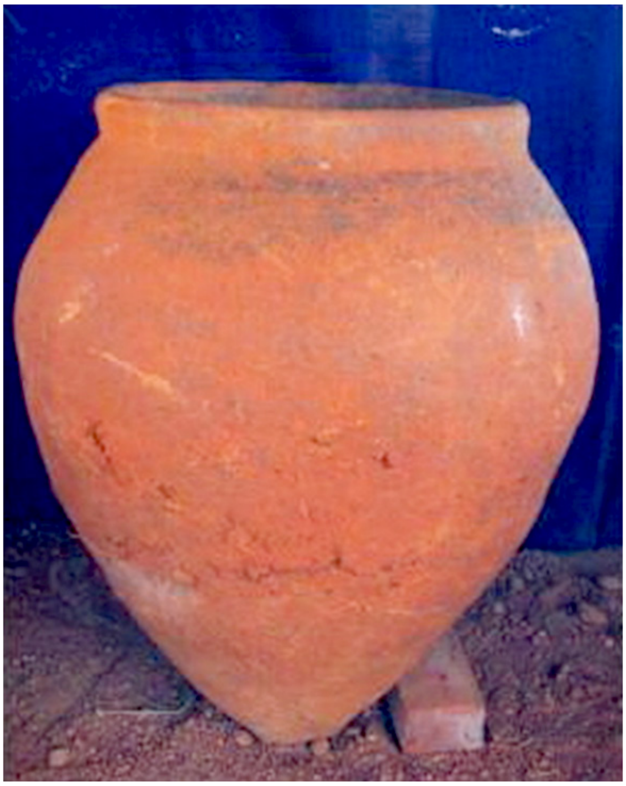
A 100 years after the last dig at Adichanallur, Mr. Satyamurthy, the Superintending Archaeologist, Archaeological Survey of India, led an excavation in Adichanallur between the years 2003 and 2005.

The dig was conducted only in the area known as Parambu, over an area of 600 square metres. In this dig, over 160 burial urns, fired-clay items, iron implements, human bones including skulls, were retrieved from various urns and trenches.



Decorated pot sherd from Adichanallur dig)

அகழாய்வில் வெளிக்கொணரப்பட்ட மட்பாண்டங்கள், தாழிகள்



ADICHANALLUR EXCAVATION: 2019-21

The excavations undertaken thus far were restricted to the burial mound known as Parambu. These allowed us to draw insights about the people's funerary customs and traditions, and unearthed burial urns and objects.

But how and where did these people live? What was their life like? What were their living customs, beliefs, practices?

It was to answer these and other open questions that the Tamil Nadu State Department of Archaeology began excavations in the habitation mound of Adichanallur.

The excavations thus far have yielded 847 artefacts, a many earthen pots and vessels of a range of types, shapes and sizes. These objects aid in reinterpreting and reconstructing Adichanallur's past, and each artefact tell us about the lives of those ancient civilization that lived on the banks of the Thanporunai river.

The aim of the ongoing excavations by the Department of Archaeology, Government of TN, is to determine as accurately as possible the dates when the earliest humans arrived and occupied this area and the first urbanization. The research also aims to identify the occupational and living zones of those people buried in the Parambu burial mounds.

The current and recent excavations and research in Adichanallur have, using evidence unearthed through scientific means, answered long standing questions.

Microlithic tools

The team unearthed microlithic tools. These were found buried in a layer beneath the burial urns that were excavated earlier. These are a blade, points and scraper

made from Chert flints.

Further, habitation mounds belonging to the Iron Age and early historic periods have been found. The dig has brought to light history of the people who lived both before and after the Iron Age.

Burial Urn

Burial urn with lid

The discovery of microlithic tools belonging to the Stone Age, and that they were found under the burial urns show that people must have lived here before the Iron Age cultures that made the urns. This could point to a period of time of early human migration to this area.

The urns and the funerary goods and objects placed in these urns are evidence for Iron Age people, and excavations both now, and in the past are ample to show that Iron Age settlement on the banks of the river thrived.

Pot sherds with Tamizhi (Tamil Brahmi) inscriptions have been found during the ongoing excavations in Adichanallur, even as we have been finding over 500 other pot sherds with graffiti and other markings on them.

This helps to establish that an early-historic, lived here. Further evidence that these early historic people continued to occupy after Iron Age and lived in these areas comes from objects of daily use, such as ceramics (pots / earthen pots), artefacts, roof tiles with openings, iron tools, and more.

Ceramic - clay pots/earthen pots, with the same quality of craftsmanship and production technology that we found in burial urns, were discovered in habitation areas. Particularly, advanced ceramic styles such as black-and-red ware with white paintings and ornamentation, are evidence of an 'elite' usage.

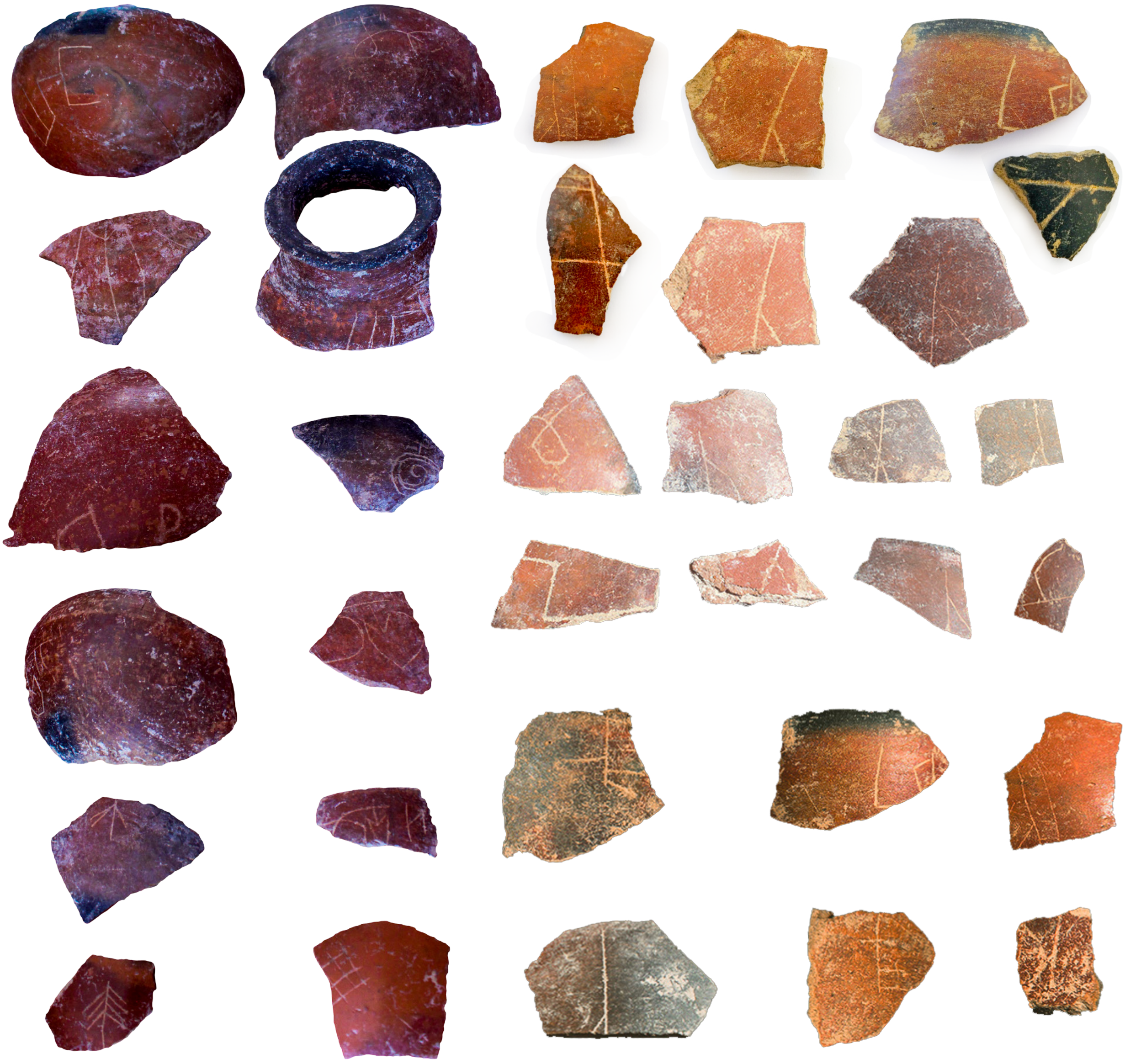
Of the other artefacts coming out of the excavation, rounded hopscotches and chips have been recovered in great numbers. Further, copper and iron rings, glass beads, ivory beads, semi-precious and other stone beads, shards of glass bangles, bone beads, terracotta beads and bangles have been found here. These are visible signs of jewellery and richness of the civilization that thrived on the Thanporunai river bank.

Objects of everyday use, such as grinding stones, polishing stones for use on packed-earth floor of houses, stone implements used to sharpen and maintain other tools have been found. As further evidence of the craftsmanship of these ancient people, birds and human figurines made from terracotta have been discovered.

Twenty one terracotta pipes, assembled horizontally, show evidence of water management. These pipes could have been used to channel waste water and sewage away from houses.

The archaeological research and excavation undertaken by the Department of Archaeology, Govt. of TN, in the habitation areas of Adichanallur complex, and the artefacts that have been recovered from these digs, are bringing to light the social, economic, art, culture, ecology and biology, literacy and language, and the everyday lives of the ancient civilization that lived on the Thanporunai exposed to the world.

தமிழி எழுத்து பொறிக்கப்பட்ட பானை ஓடுகள்



குறியீடுகள் பொறிக்கப்பட்டப் பானை ஓடுகள்

இரும்பினாலான தொல்பொருட்கள்

மேற்கூரை ஓடுகள்

சிவப்பு மற்றும் கருப்பு–சிவப்பு நிறப் பானைகள், கிண்ணங்கள்

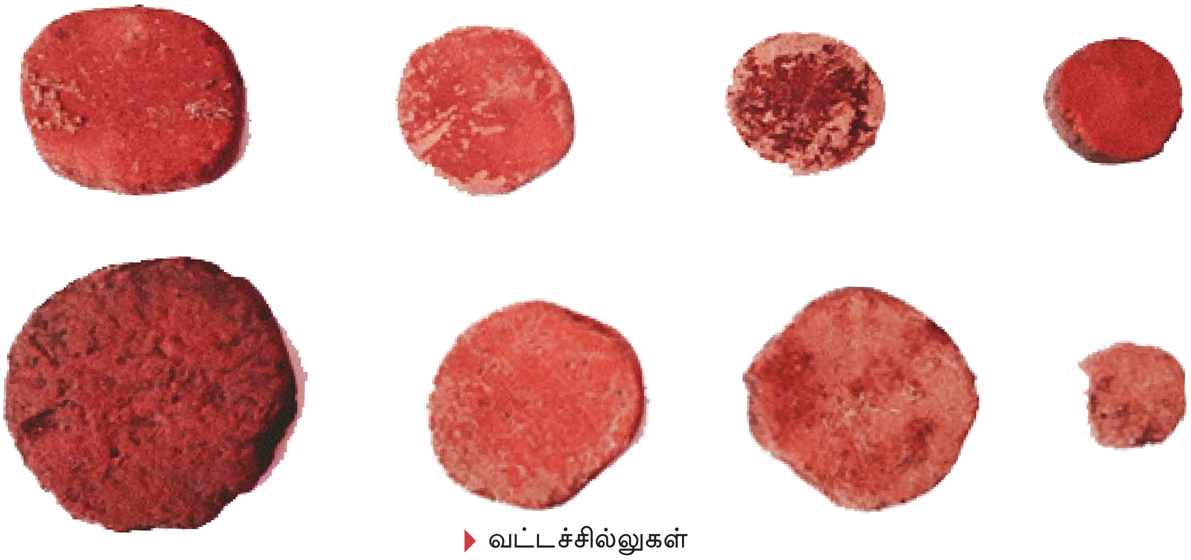
Sivagalai is situated at 31 km away from Thoothukudi, in EralTaluk of Thoothukudi district and 10 km away from Srivaikundam. It is on the northern bank of the Thamiraparani river.

Like Keeladi, Sivagalai is place where ancient Tamils lived and should be considered as a symbol of ancient

தந்தத்தினாலான மணி

ஆட்டக்காய்கள்

செம்பு வளையங்கள்



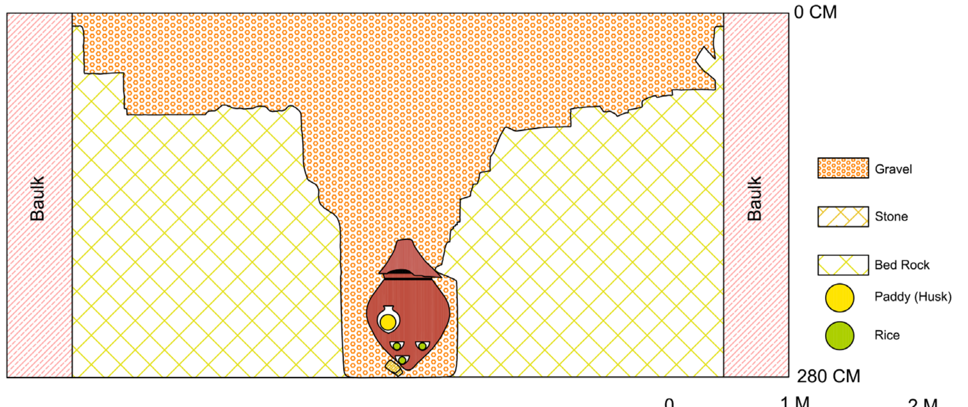
வட்டச்சில்லுகள்

Tamil culture. The pot with Damili (Tamil-Brahmi) name Aadhan discovered at Sivagalai during the first excavation reminds us of Keeladi. Though there are no discoveries of gold or copper artefacts as in Adichanallur, the beautifulblackand-red ware with white painted pots, lids and jars establish that the Tamil society which lived in Sivagalai during the Iron Age is very old. The carbon dating of the paddy found in excavation has yielded results dating to 1155 BCE.

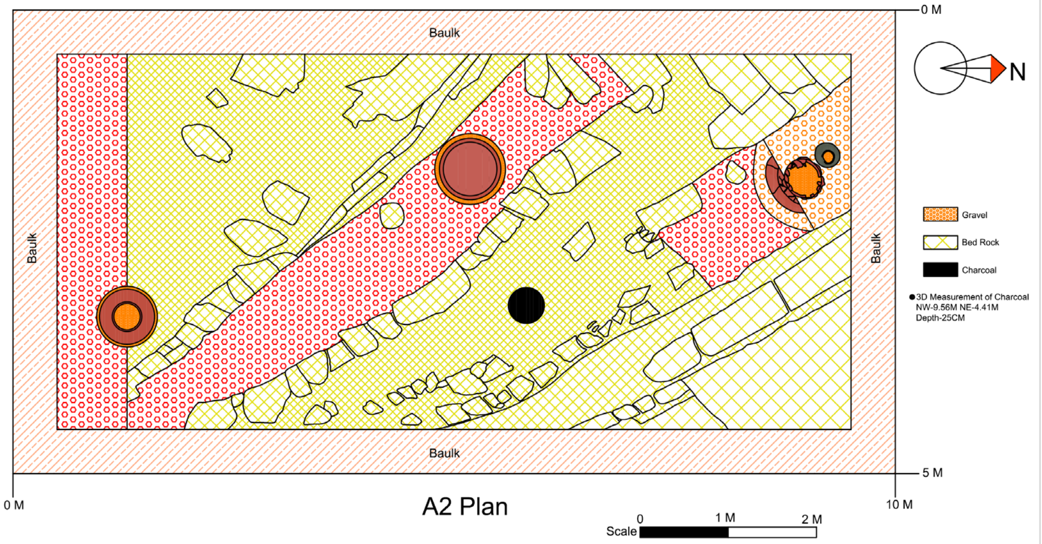
அகழாய்வில் முதுமக்கள் தாழி

வெள்ளை வண்ணம் பூசப்பட்டுள்ள விளிம்புடன் கூடிய கிண்ணம்

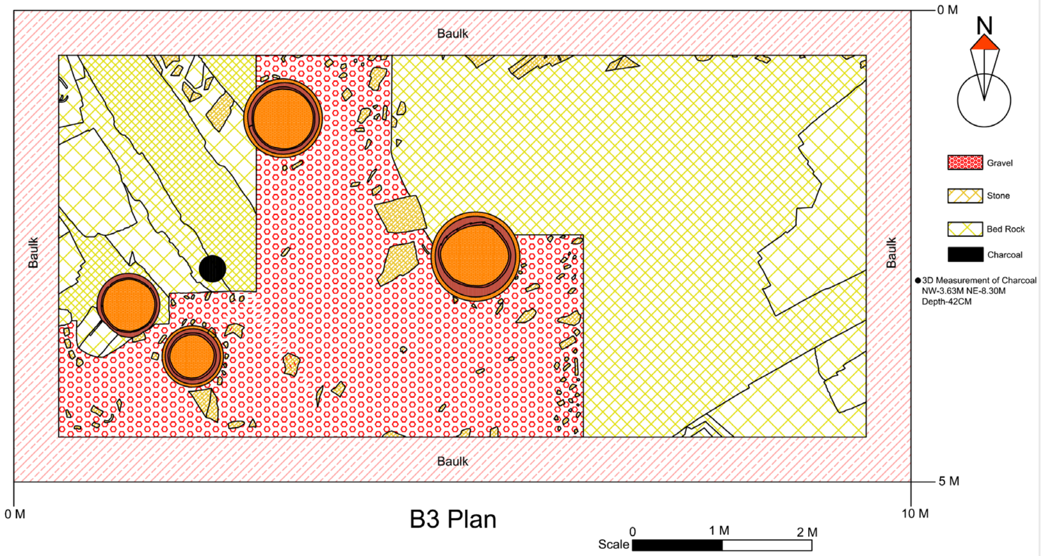
வரைபடக்குறிப்புகள்



A2 Urn No:3 Section



A2 Plan



B3 Plan

MICROLITHIC TOOLS

வட்டச்சில்லுகள்

நுண் கற்கருவிகள்

KORKAI EXCAVATION

The middle-Sangam era Pandyan capital and port town of Korkai was the site ofexcavation conducted by the Tamil Nadu State Department of Archaeology in 1968-69. The excavations were historically significant. Organic material found during the excavation was dated to 785 BCE.

Korkai, situated in Eral Taluk of Thoothukudi district in Tamil Nadu, is once again placed for excavation by the Tamil Nadu State Department of Archaeology, which began this year. Already many artefacts are being unearthed n.

Evidence of shell bangle making industry have been found. Conch shells - several fully intact, many half cut, and many more fully broken have been found, evidencing manufacture of ornaments.

Close by, a square, brick-built structure perhaps dating to the Sangam period, having aheight of 2.35 m tall, and containing 29 courses. A large pot, placed in the centre of the brick structure, has just been revealed. The floor was made of stacked limestone slabs, over which sand and earth was packed in to create a level foundation, on which the brick structure was built. The construction is unique and special.

Near this, the excavation has revealed a perforated filtering pipe. The pipe, with openings at either end, also consists of 9 courses. Thepotsherds belong to the Western world have also been found near the pipe.

These, together with the brick structure, adds to the excitement at the range of discoveries so far. The evidence unearthed so far point to the fact that Tamil Nadu has had long-established trade relations with other countries.

Recently, Black Slipped Ware of the Gangetic Valley datable prior to5th century CE were found.

Additionally, silver punch-marked coins, Northern Black Polished Ware, and Black slipped ware point to extensive trade relations between Tamil Nadu and various parts of India, even before 6th century BCE as suggested by Dr.RakeshTiwari, the former Director General of the Archaeological Survey of India, and Prof. Ravindranath Singh of Banaras Hindu University.

We can also conclude, based on the evidence of other extensive archaeological sites in the sur-

rounding areas and findings from there, that Korkai port must have been founded and operational prior to 8th century BCE. This date confirms that Korkai had trade relations with West, SoutheastAsia and other parts of India well before 8th Century BCE.

Dating of grains of rice paddy collected from an urn excavated from the Sivagalai Parambu yielded a date of 1155 BCE. This allows us to conclude that the Tamil society lived on the banks of Porunai river led an advanced civilization 3200 years before present.

Objects of high quality bronze and gold, evidence of an advanced tradition and customs including funerary rituals and burials unearthed from archaeological excavations of both Adichanallur and Sivagalaistands as an evidence of the quality of social and economic lives of the people who lived here in the ancient past.

The date obtained for the paddy collected from the Sivagalai excavation demonstrated that the Porunai river valley civilization which contains the archaeological sites such as Adichanallur, Sivagalai andKorkai,thrived on the banks of the river Porunai3200 years ago

Documentation

TARUNA

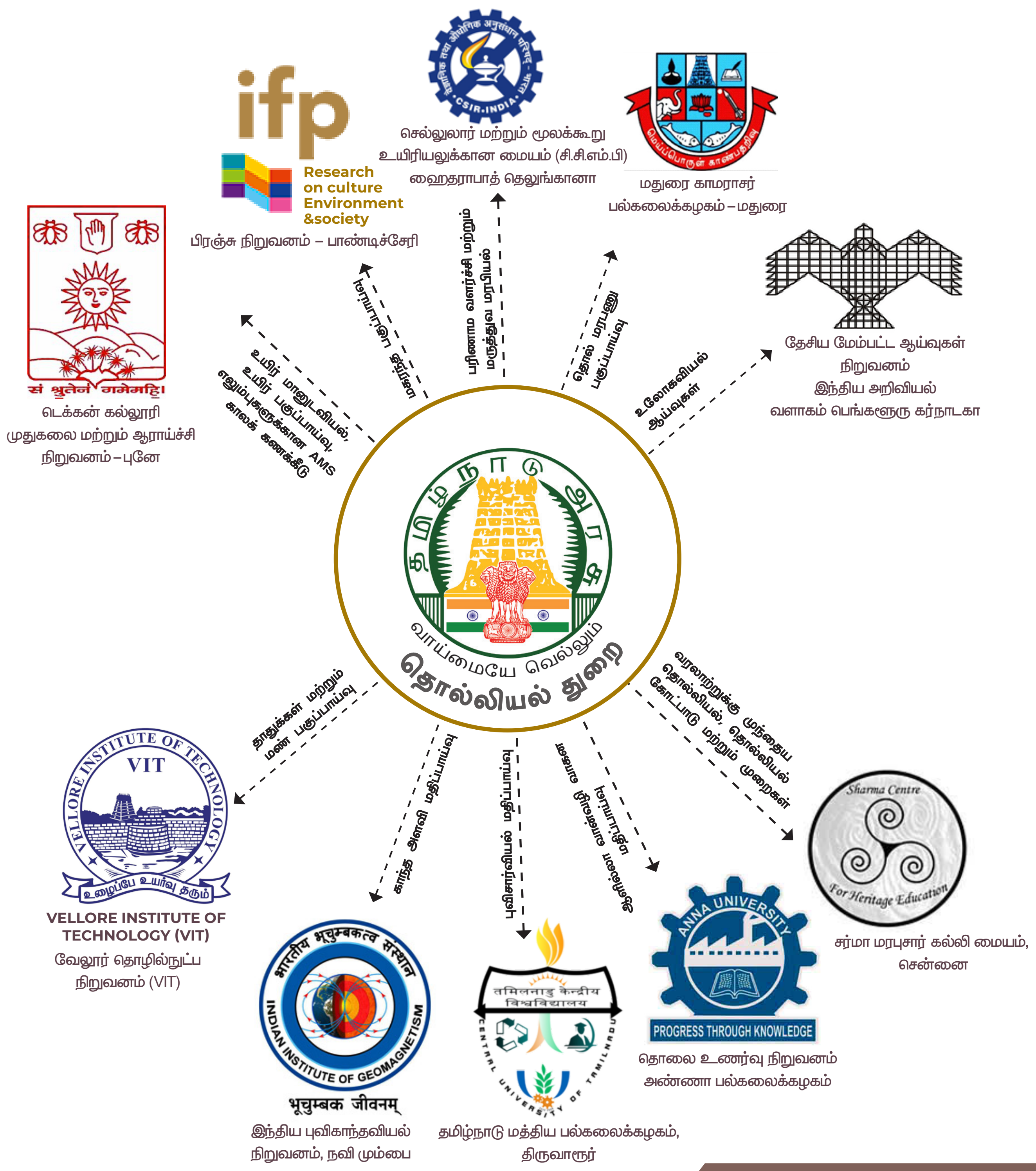
WORKING WITH EXPERTS AND VARIOUS DEPARTMENTS

The Tamil Nadu State Department of Archaeology works with experts from various departments including Palaeobotany, Molecular Biology, population genetics, environmental archaeology and linguistic archaeology, with full understanding of the departments' valuable contributions and in recognition of archaeological discoveries.

In this great effort, the Department associates with premier organisations such as Indian Institute of Geomagnetism, Mumbai, Indian Institute of Sciences, Bangaluru, Department of Remote Sensing,Bharathidasan University, Trichy,s, Department of Remote Sensing Anna University, Chennai, Indian Institute of Technology, Chennai to identify archaeological sites and also to undertake archaeological explorations and excavations by using various technologies including ground penetrating radar, magnetometer survey and unmanned aerial vehicle. The interest in archaeology and our culture has found a renewed interest in Tamil Nadu. A huge opportunity to make research about the past is available now. Under the guidance of experts such as K Rajan, Former Professor of History, Pondicherry University, Professor Shanti Pappu ,Secretary, Sharma Centre for Heritage Education, and Dr.V Selvakumar, Department of Maritime History and Marine Archaeology, Tamil University, Thanjavur, the Tamil Nadu State Department of Archaeology undertaking excavations and archaeological researches. The Tamil Nadu State Archaeological Department leaves no stone unturned to trace the roots of our heritage, document it and expose it to the world so as to gain the Tamil society's rightful place in the world history and to establish Tamil culture in the world arena.

The premier institutes offering their cooperation

It has been decided to hold scientific researches and studies of artefacts found in current archaeological excavations through the following premier archaeological and scientific research institutes and organisations. Steps are also being taken to establish an ancient DNA lab at the cost of Rs 3 crore at Madurai Kamaraj University.



IN THE WORDS AND VIEWS OF EMINENT ARCHAEOLOGISTS AND RESEARCHERS

Dr. Rakesh Tewari

Former Director General
Archaeological Survey of India
New Delhi

"

It gives me great pleasure to write on the archaeological activities going on in Tamilnadu. About 25 years ago I got an opportunity to have a look at the potsherds of Northern Black Polished Ware (NBP) recovered from Korkoi and to know about a radiocarbon date available from the associated levels. Based on that it was my opinion that the contacts between South India and North India might be as early as 600-700BCEor even earlier. The outcome of the recent excavations at Keeladi, Kodumanal and other sites in Tamilnadu, including NBP, Black Slipped Ware and a good number of potsherds with Brahmi inscriptions (5th-6th century BCE radiocarbon dates, earliest so far) have corroborated that view. The same has also pushed back the antiquity of urbanisation in that region at par with North India.

Apart from the above it is notable that the evidence for human activities datable to about 1.5 million years before present is known from the site of Atirampakkam (Tamilnadu). Recent archaeological research in Tamilnadu have also provided firm evidence to place well developed iron technology including steel iron during around 1300 BC. Urn burial sites of Sivakashi and Adichannallur are also dated to 15th-16th century BC. Early antiquarian remains comprising bronze, gold, beads et.al indicate well established socio-economic activities. These finds show evolution of human cultures in the region from Stone Age to the Modern Period. In order to get a clearer picture of this process consistent multidisciplinary research is highly required in the entire geo-unit including Tamilnadu, Kerala, South Karnataka, Andhra as well as Shri Lanka.

"

Dr. Ravindra N. Singh

Professor,
Deputy Coordinator (CAS-UGC) &
Principal Investigator (India)
BHU-Cambridge ERC & DST-UKIERI Project
Hon. Research Associate,
McDonald Institute for Archaeological Research, Cambridge
Department of AIHC & Archaeology
Banaras Hindu University

.

"

Fortunately, I have had opportunity to visit most of the sites of Tamil Nadu states under the collaborative project of the University of Cambridge and the Banaras Hindu University under the leadership of Padmsri Prof Dilip Chakrabarti in association with Prof K Rajan and Dr Rakesh Tewari, Ex Director General, Archaeological Survey of India.

Our survey based fieldwork enlighten us in understanding the connection of the Ganga Valley with the Vagai Valley and beyond up to the Kanyakumari, with the courtesy of Prof K Rajan.

In view of early dates of Brahmi in 5th century BC, occurrence of deluxe variety of NBP dateable to 6th century BC, developed town planning at Keeladi, there is great desideratum of national (particularly with north India) and international collaboration in field of scientific archaeological research. There is great scope of scientific researches in the field of human evolution, trade connections with other parts of the country and ancient world, development of metallurgy, particularly tin bronzes, epigraphical studies and many more

"

BIBLIOGRAPHY

Caldwell, 'History of Thirunelveli" (Tamil translation)

Padma Sri Prof. **Dilip K Chakrabarti**

Emeritus Professor of South Asian Archaeology

Cambridge University, Cambridge, UK

and Distinguished Fellow of Vivekananda International Foundation, New Delhi

"

PMC from Keeladi shows, along with other finds of PMC in T'nadu, that the beginning of the historic period in the south, cannot be later than the 6th-5th cent BC. In the north I have dated the early historic beginning as a process that happened between 800-500 BC. It has been good to see NBP/black-slipped from Korkai. There is an early date (earlier than 6th cent BC)of the NBP-associated context of Korkai -- I am forgetting the exact date, but please trace it. 1155 BC seems to be more logical, high tin bronze around 1155 BC is interesting in itself.

"

Susmita Basu Majumdar

Professor

Department of Ancient Indian History and Culture

University of Calcutta

"

However the other one which is recently found i.e. in 2021 is an Imperial Silver Punch Marked coins of Gupta Hardekar Series IV, No. 418 XXI G2. Similar coin was also reported in the Amaravati hoard. Reverse has a single checking or control mark. It has five punches on the obverse these are as follows: Sun , Six armed symbol with alternate taurine in a elliptical ovoid, Hare or dog on a five peaked hill, Pellet in a circle with two taurine symbols on either sides.

The coin which was found in 2018 may belong to Series III, GH 291-94 but I am not quite sure about is as it is highly corroded. Following Gupta Hardekar they are both Pre Mauryan.

"

நூலடைவுப் பட்டியல்

1. கால்டுவெல், "திருநெல்வெலி சரித்திரம்" தமிழாக்கம் :
   ந. சஞ்சீவி மற்றும் கிருஷ்ண சஞ்சீவி, 2004. காவ்யா பதிப்பகம், சென்னை. பக்.17.

2. சேக்கிழார், "திருத்தொண்டர் புராணம் என்னும் பெரியபுராணம்" மும்மையால் உலகாண்ட சருக்கம் :
   மூர்த்தி நாயனார் புராணம், 1870 வர்த்தமான தரங்கிணீ அச்சுக்கூடம், சென்னபட்டணம், பக்.127.

3. பரஞ்சோதி மாமுனிவர், "திருவிளையாடற் புராணம்" பாண்டி திருநாட்டுப் படலம் பாடல் :7,
   நா.கதிரைவேற் பிள்ளை பரிசோதித்தது. 1928. வித்தியா ரத்னாகர அச்சுக்கூடம், சென்னை.

4. புறநானூறு மூலமும் பழைய உரையும் பாடல் எண்.11 வரி எண்.5
   பதிப்பாசிரியர் டாக்டர் உ.வே.சாமிநாதையர் 1971. உ.வே.சாமிநாதையர் நூல் நிலையம், சென்னை. பக்.31

5. கம்ப இராமாயணம்: கிட்கிந்தா காண்டம் நாடவிட்ட படலம்31

6. கலைக்களஞ்சியம் தொகுதி 5,
   1958. தமிழ் வளர்ச்சிக் கழகம், சென்னை. பக்.575

7. இராகவன், அ."கோநகர் கொற்கை" மறுபதிப்பு 2005.
   அமிழ்தம் பதிப்பகம், சென்னை. பக். 3439.

8. இராகவன், அ. "ஆதித்தநல்லூரும் பொருநைவெளி நாகரிகமும்" மறுபதிப்பு 2007.
   அமிழ்தம் பதிப்பகம், சென்னை.

9. Smith, Vincent A. **"The Early History of India"** 1962. Oxford, Madras. **p. 469**

10. **Epigraphia Indica Vol. XI.** 1981. Archaeological Survey of India, New Delhi. **p.293**

11. **South Indian Inscriptions Vol. VIII,** 1986. Archaeological Survey of India, Mysore. **p.236**

12. **Annual Report on Indian Epigraphy 1906 no. 411,** Archaeological Survey of India, New Delhi. **p.32**

நிழற்படங்கள் கொடுத்துதவியவர்களுக்கு நன்றி

1) **திரு. சி.அ. ராமன், இ.ஆ.ப.,** இயக்குநர்,
   அரசு அருங்காட்சியகங்கள் துறை

2) **திரு. எல். ராமச்சந்திரன்,** நிழற்படமெடுப்பவர்

3) **தமிழி** ஆவணப்படக் குழுவினர்

புத்தக வடிவமைப்பு - **கதிர் ஆறுமுகம்**

"Let us explore the world to find the roots of the Tamil Culture"

Funded and Marketed by :
Tamil Nadu Textbook and Educational Services Corporation,
Government of Tamil Nadu, Chennai – 600 006
₹60.00